

Testimony of
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Introduction

I would like to thank you, Mr. Chairman and Members of this Committee, for the opportunity to appear before you today as you consider the U.S. Government's strategies to combat global water challenges, including access to safe water and sanitation in the developing world, and H.R. 1973, the "Water for the Poor Act of 2005." My summary statement, along with the submitted written testimony, responds to the Committee's request for information on each of the topics listed in your letter of invitation to testify.

The global water challenge is indeed large, but we are making progress. USAID's interventions are strategic and focus on creating the enabling environment for sound governance and financing, creating partnerships in the public and private sectors, and leveraging resources.

While it is correct to place emphasis on the delivery of water supply and sanitation services, we recognize that there is demand for reliable sources of clean water across multiple sectors in every country. USAID and other federal agencies involved in the delivery of technical assistance in the water sector remain committed to promoting the efficient management and development of water resources, consistent with the principles of Integrated Water Resources Management (IWRM), tailored to local conditions, and in partnership with government, private sector, and civil society institutions wherever we work.

We are more clearly articulating a shared understanding of the central role that water security plays in virtually all areas of the U.S. international development agenda. All of USAID's major goals and several U.S. national interests are affected by our success in achieving integrated water resources management, including peace and national security, economic and food security, human health, ecological sustainability, humanitarian response, and democracy and human rights (see Box 1).

Box 1
Water and the U.S. National Interest

- **Peace and National Security.** Water security at the local, national, and transboundary scale can contribute enormously to promoting a peaceful and secure world, fostering local and international cooperation, and preventing a myriad of foreign policy, diplomatic, and security problems.
- **Economic and Food Security.** Sustainable water resources management has significant implications for promoting economic growth and agricultural productivity worldwide, and can yield concrete benefits for U.S. private sector abroad.
- **Human Health.** Water insecurity has a direct bearing on the health of billions of people around the world, due to insufficient water, water contamination from human activities, and poor sanitation and hygiene practices.
- **Ecological Sustainability.** Appropriate water quantity and quality guarantee the sustainability of ecosystems upon which human societies and economies depend today and in the future.
- **Humanitarian Response.** Actions to predict, prevent, prepare for, mitigate, and respond to natural and human caused water-related disasters can help protect huge populations, especially the most vulnerable, and limit damage to billions of dollars in property and infrastructure necessary for economic survival.
- **Democracy and Human Rights.** Democracy and water security are mutually reinforcing goals, and democratic forms of governance are both a requirement for and a product of sustainable, integrated water resources management (IWRM).

The U.S. Strategic Framework in International Water

USAID has worked in the water sector since the 1960s. In the early decades of its work, the Agency engaged in a wide range of water-related activities, including dam construction, irrigation works and agricultural practices, water and sanitation infrastructure, and capacity and institution building across the entire spectrum. With lower funding levels in recent decades, as well as an increased emphasis on the human, social, economic and political dimensions of water resources management, interventions moved away from capital infrastructure activities toward the policies, laws, institutions, operational strategies, and financing necessary to build upon and sustain progress over the longer-term. In strategic states such as Egypt, Jordan, West Bank/Gaza, and most recently in Afghanistan and Iraq, USAID continues to invest in capital infrastructure, including public works for water supply and sanitation. USAID also undertakes capital projects in post-emergency humanitarian and reconstruction response, such as hurricanes, earthquakes, or the recent South Asia tsunami. Such capital intensive projects have been the exception. Our strategic approach has been to work with countries that have made clean water and public health a national goal to improve water sector institutions and reform water and sewerage utilities so they are financially sustainable and capable of providing reliable and affordable water to their people.

Since 1998, USAID has become increasingly engaged in the international dialogue on water, sharing the Agency's technical experience and promoting policy initiatives and development models at globally recognized events, including the World Water Forums (2000; 2003), the World Summit on Sustainable Development (WSSD, 2002), and the Commission on Sustainable Development (CSD, 2004; 2005). USAID has supported the USG commitment to the internationally agreed goals contained within the Millennium Declaration and the Johannesburg

Plan of Implementation related to water, sanitation, and water resources management (see Box 2).¹

Box 2
Sharing an International Commitment

USAID is working with other U.S. Government agencies and the international community to accelerate and expand international efforts to achieve both United Nations Millennium Declaration Goals and the Johannesburg Plan of Implementation resolutions related to water, sanitation and Integrated Water Resources Management (IWRM):

“Halve, by the year 2015.....the proportion of people who are unable to reach or afford safe drinking water” (*Millennium Declaration*)

“Halve, by the year 2015, the proportion of people who are unable to reach or to afford safe drinking water....and the proportion of people without access to basic sanitation.” (*Johannesburg Plan*)

“Develop integrated water resources management and water efficiency plans by 2005, with support to developing countries.....” (*Johannesburg Plan*)

Water: A G-8 Plan of Action (2003)

Building on the outcomes of these international events and declarations, the G8 countries agreed to a “Water Action Plan” at the G8 Summit at Evian, France in 2003.² This Plan lays out principles that reflect USAID’s strategic direction in the international water sector, and provides a useful framework to understand the Agency’s programming priorities for water supply, sanitation, and water resources management.

The Plan lays out five major areas in which USAID is currently taking a significant leadership role in its international water programs:

- Promoting good governance;
- Utilizing all financial resources;
- Building infrastructure by empowering local authorities and communities;
- Strengthening monitoring, assessment, and research; and
- Reinforcing engagement of international organizations

While each of these areas will be discussed separately, USAID’s water sector activities individually and collectively incorporate and integrate all of these core strategic principles to maximize the effectiveness of the Agency’s investments.

¹ See United Nations General Assembly Resolution 55/2 of 8 September 2000 (<http://daccessdds.un.org/doc/UNDOC/LTD/N00/631/37/PDF/N0063137.pdf?OpenElement>) and the Johannesburg Plan of Implementation 2002 (http://www.un.org/esa/sustdev/documents/WSSD_POI_PD/English/POIToc.htm)

² http://www.g8.fr/evian/english/navigation/2003_g8_summit/summit_documents/water_-_a_g8_action_plan.html

Promoting good governance is at the very heart of the U.S. international water sector strategy. USAID actively promotes an integrated water resources management approach, emphasizing transparent and capable institutional and legal frameworks from the local to the river basin, watershed, or coastal landscape scale. The Agency's interventions furthermore work to build the political will and commitment of countries to ensure both adequate delivery of water, sanitation, and hygiene services and the sustainability and protection of the water and watershed resources and ecosystems upon which these services depend, including lakes, reservoirs, rivers, groundwater, and coastal/estuarine zones (see Box 3).

Box 3
Promoting Good Governance

- Integrated river basin management, governance, and institutional strengthening has been the focus of efforts in **Morocco's Souss-Massa River Basin**, where USAID's investment over 10 years has improved water resources management and developed a model for basin governance that can be replicated throughout the country.
- In the **Okavango River Basin in Southern Africa**, a new USAID transboundary activity will work to strengthen the capacity of the regional river basin commission and participating governments to reform policies, improve water management planning, and encourage more efficient utilization of water resources among competing sectors. The project will develop the capacity of communities to manage water and ecological resources in a sustainable manner.
- A long-standing program in the 326,000-hectare **Panama Canal Watershed** supports watershed and land use management to ensure efficient operation of the Canal, protect biodiversity, and enhance livelihoods of residents. Institutional strengthening at the watershed scale is coupled with local governance support and promotion of best practices to maintain vegetative cover, protect water quality, and strengthen protected areas management.
- In **Jamaica**, USAID is the leader on a 'Ridge-to-Reef' approach in target watersheds and coastal areas, focusing on reducing the impact of contamination from agricultural runoff and nutrient-rich sewage effluent through interventions for improved agricultural practices and watershed management, education, and enforcement. The program utilizes a participatory governance approach to identify and prioritize interventions and has established extensive stakeholder and community consultations to achieve local ownership and commitment.
- In **Indonesia**, USAID has linked the delivery of services in water supply, sanitation and hygiene to upper watershed management and the maintenance of the environmental services provided by intact systems. A focus on improved health through integrated water supply and sanitation services, hygiene behavioral change, food security, and healthy ecosystems is undertaken through the involvement of stakeholders in decision-making, the full engagement of the public and private sectors, as well as the proper policy and enabling environment for financial and environmental sustainability.
- USAID's support to **Romania** replaces a centralized governance approach with a participatory, demand-driven system for more sustainable water resources management. Through participation in Water Users Associations (WUAs), farmers in the Danube River Valley were trained in improved irrigation and soil management practices. Ongoing training and technical assistance supports WUAs and relevant agencies with WUA organization, management, financial administration, and operation and maintenance of irrigation systems.
- USAID has supported a worldwide program to improve integrated lake and reservoir basin management, with pilot projects in **India, Nicaragua, Kyrgyzstan, Philippines, Armenia, Ethiopia, and Indonesia**. The effort established an international network of lake basin managers for increased awareness and exchange of information. It also develops and distributes best management practices, develops and provides access to lake basin management tools, and provides technical assistance for capacity building in select lake basin communities and countries. Partners included LakeNet, the International Lake Environment Committee, the Japanese Prefecture of Shiga, the World Bank, the Global Environment Facility, and lake managers and researchers from over 25 countries.
- Integrated water resources management is a major focus of USAID's assistance to **Jordan** and supports the effective use of reclaimed water, the promotion of irrigation efficiency, the reduction of unaccounted-for municipal water, and improved cost recovery. The Ministry of Water and Irrigation (MWI), with USAID support, has helped satisfy the rapidly growing demands of communities, industries, and farmers in the face of very limited water resources. As the leading donor in the water sector, USAID has provided a mix of construction activities, technical assistance, and institutional strengthening.

Utilizing all financial resources from the public and private sectors is absolutely necessary to address the enormous water challenges facing the developing world. Access to clean drinking water and adequate sanitation in particular will only become a reality through substantial private sector investment and public-private investments in the protection of water source areas. Mobilizing these resources is a formidable challenge and will require significant legal and regulatory reforms and interventions, credit enhancements, commercial advisors and managers, an enabling public sector, and a public willing to pay market-based rates for water. USAID is a global leader in promoting innovative models to leverage capital for water and wastewater infrastructure through loan guarantees and other credit enhancements, revolving funds, private sector partnerships, payments for environmental services, and enhanced donor coordination (see Box 4).

Box 4
Utilizing All Financial Resources

- In **India**, USAID used its Development Credit Authority (DCA) as a credit enhancement for the pooled financing of several municipal urban infrastructure projects. DCA is a proven and effective tool that permits USAID to issue partial loan guarantees to private lenders to achieve economic development objectives, helping mobilize local capital in creditworthy but underserved markets. In the state of Tamil Nadu, \$6.4 million was made available to participating municipalities, providing benefits to an estimated 593,000 people. The pooled financing mechanism supported by DCA will provide investment funds to small and medium urban local bodies (ULBs) to implement water and sanitation projects, which will benefit low-income populations. USAID also used a DCA guarantee to support the second pooled municipal bond issuance to improve and expand provision of water and sewerage services in the Bangalore Metropolitan Area, through a \$21.7 million bond for eight municipalities.
- DCA credit enhancement in **South Africa**, complemented by technical assistance and utility performance standards, is supporting water and sanitation service expansion. Municipal management improvements are matched with capital investment, resulting in expanded quality and quantity of water and sanitation services to the urban poor. This effort builds on successful financing of earlier water projects, such as municipal loans to the Greater Johannesburg Metropolitan Council, which the DCA helped place with ABSA Bank.
- Private sector participation in the infrastructure sector has historically been limited in **Egypt**. With USAID assistance, however, the Ministry of Housing and the South Sinai governorate in Egypt agreed to outsource the operations and maintenance for an entire water system covering nine cities, including plants, pumping stations, and networks. Under this new arrangement, the governorate focused on contract management and collections, and held the contractor accountable for performance through a performance-based contract. With a DCA guarantee, local commercial banks will provide up to \$40 million in loans to improve and expand water and wastewater services, and serve as a model for replication in other parts of the country.
- In the **Philippines**, as part of the U.S.-Japan Clean Water for People Initiative announced at WSSD, USAID and JBIC launched the “Municipal Water Loan Financing Initiative” (MWLFI) with local partners, the Development Bank of the Philippines (DBP), and the Local Government Unit Guarantee Corporation (LGUGC). The MWLFI will facilitate the financing of local water supply and sanitation programs by combining Japanese development assistance funds with a matching amount of private sector Philippines resources guaranteed by LGUGC and DCA. The “Philippines Water Revolving Fund” was also initiated based on a U.S. state/local model, and the government of the Philippines is receiving assistance to make the necessary regulatory changes to establish the fund. This model is being followed closely by the governments of other Asian countries.
- In **Mexico**, USAID supported the development of a national regulatory framework that allows for the creation of municipal bonds. Having achieved success, USAID’s partners are now working with municipalities to structure favorable bond issuances that enable the municipalities to tap the local capital market to finance vital infrastructure projects.
- Working with a variety of partners in Latin America and Asia, USAID is exploring ways to link payment by downstream users for environmental services provided by upland watersheds, as a way to promote watershed management. USAID projects in **Jamaica**, **Tanzania**, and **Panama** are in various stages of analysis, development and implementation of such mechanisms to support financing of environmental services provided by healthy watersheds, including safeguarding water supplies and reducing sedimentation into hydroelectric dams.

USAID programs are likewise committed to ***building infrastructure by empowering local authorities and communities*** through programs that promote community ownership and participation; decentralized and transparent governance; household level technologies for basic sanitation and safe drinking water; and the vital role that women play in meeting community water, sanitation, and hygiene goals. USAID is especially committed to improving the reach of our foreign assistance mandate by increased involvement in public-private alliances, and created the Global Development Alliance (GDA) to support the development and consolidation of such partnerships. By forging and supporting alliances in the water sector, USAID is helping to mobilize the ideas, efforts, and resources of governments, businesses, and civil society to address the need for water supply, sanitation, and sustainable financing (see Box 5).

Box 5

Building Infrastructure by Empowering Local Authorities and Communities

- The **West Africa Water Initiative (WAWI)** is a \$42 million, seven-year partnership of thirteen private and public organizations created in 2002 by the Conrad N. Hilton Foundation. WAWI's objective is to invest in small-scale potable water supply and sanitation activities in rural and peri-urban areas in Ghana, Mali, and Niger, with these activities serving as the entry point for an integrated approach to water resources management and development. USAID's commitment as part of this alliance is about \$5.5 million to be spent over four years (FY02-05), matched by over \$18 million from the Hilton Foundation, and an equal amount from the other partners. The full range of activities that will be undertaken by all partners includes enhanced governance and the enabling environment, well drilling and rehabilitation, alternative water source development, construction of latrines, household and school based sanitation and hygiene education, community mobilization, hydrogeological analysis, policy development, livelihoods, income generation and food security, information management, and gender mainstreaming. By 2008, a minimum of 825 boreholes, 100 alternative water sources for income generation, and 9,000 latrines are anticipated, reaching more than a 450,000 people. The WAWI partnership is currently engaged in strategic planning about the future, including consideration of how to replicate and scale up its model.

***Partners:** Conrad N. Hilton Foundation, USAID, World Vision, WaterAid, UNICEF, Desert Research Institute (DRI), Winrock International, the Cornell International Institute for Food, Agriculture and Development (CIIFAD), Lions Clubs International, the International Trachoma Institute, the World Chlorine Council, the U.N. Foundation, and Helen Keller International.*

- The **Safe Drinking Water Alliance** is a strategic public-private collaboration to develop innovative program approaches for ensuring the safety of household water intended for human consumption. In late 2003, USAID, Johns Hopkins Bloomberg School of Public Health/Center for Communication Programs, CARE, Population Services International, and Procter & Gamble joined forces to leverage their respective expertise and resources to better understand the behaviors and motivations for choosing particular technologies for treating household water, share the knowledge gained, and identify opportunities for scaling up successful efforts to ensure safe drinking water. USAID is supporting the Alliance with \$1.4 million to implement programs in Pakistan, Haiti, and Ethiopia which leverage in-kind and financial contributions from Procter & Gamble estimated at approximately \$3.5 million, as well as technical and program support resources from the other partners.

***Partners:** USAID, Johns Hopkins Bloomberg School of Public Health/Center for Communication Programs, CARE, Population Services International (PSI), and Procter & Gamble*

- USAID is launching a new global **Community Watershed Partnership** with The Coca-Cola Company to provide grants in eligible beneficiary countries to support community watershed protection and improved water supply and sanitation for the world's poor. Projects will involve collaboration among USAID Missions and implementing partners, local and national governments, and local Coca-Cola bottlers to develop and implement a range of activities appropriate for each country. In the first year, the \$2.3 million partnership will initiate activities in Mali, Bolivia, and one other location to be selected through a competitive grants process.

***Partners:** USAID, The Coca Cola Company, and the Global Environment and Technology Foundation*

Sound water resources management requires *strengthening monitoring, assessment, and research* in order to support water resources management decision-making with sound science and information. USAID is supporting data-collection and information management in most of its country-level programs. For example, in the Okavango River Basin in southern Africa and the Kura-Aras Basin of the South Caucasus, transboundary information collection, management, and data-sharing protocols are fundamental to the larger tasks of river basin management. Other examples include the installation of automated meteorological stations to improve the regional network for weather and snowmelt data collection in the five Central Asian Republics; remote sensing and GIS analysis applied to drought forecasting in Africa and lake basin management in Kyrgyzstan and Armenia; and participatory water quality monitoring in the Pastaza River in Peru. The Agency also supports sector-level applied research through its core support to international research networks and universities (see Box 6).

Box 6
Strengthening Monitoring, Assessment, and Research

- **Collaborative Research Support Programs (CRSPs)** are communities of U.S. Land Grant Universities that work with developing country agricultural research systems, international agricultural research centers, U.S. agribusinesses, private voluntary organizations, developing country colleges and universities, USAID, and other federal agencies such as USDA. Water-related applied research, development of decision-support methods, development and dissemination of technical tools and approaches to increase efficiency and sustainability, and building of local capacity for participatory governance and management are promoted through CRSPs that focus specifically on Pond Dynamics/Aquaculture (PD/A) and Sustainable Agriculture and Natural Resource Management (SANREM).
- The **Consultative Group on International Agricultural Research (CGIAR)** is an association of public and private members supporting a system of 15 International Agricultural Research Centers that work in more than 100 countries. The CGIAR mobilizes cutting-edge science to reduce hunger and poverty, improve human nutrition and health, and protect the environment. The Group's mission is to contribute to food security and poverty eradication in developing countries through research, partnerships, capacity building, and policy support thereby promoting sustainable agricultural development based on the sound management of natural resources. USAID provides core support to several CGIAR centers, including the International Water Management Institute (IWMI) and the World Fish Center. In addition, since 2000, IWMI staff members have participated in long-term secondments to the USAID Water Team.
- USAID is supporting development of a methodology to determine the needs for **Freshwater Inflow to Estuaries**. In late 2003, USAID, The Nature Conservancy and the University of Rhode Island Coastal Resources Center launched an ambitious project to develop and apply low-cost methods for assessing changes in volumes, pulsing, and quality of water to estuaries, and to work with governmental and non-governmental stakeholders to formulate action strategies to begin to address the consequences of such changes. Pilot initiatives are underway in both the Dominican Republic (the *Yuna River/Samana Bay*) and in Mexico (*Laguna de Terminos*), and a Methods Guide will be available in early 2006.
- Methodologies and approaches adapted to the developing country context in **Water Resources and Watershed Economic Valuation** have also been advanced by USAID through pilot activities in Latin America and elsewhere, documentation of lessons learned, and dissemination of a "how-to" manual for USAID officers to integrate valuation approaches in their water management programs.

Finally, USAID collaborates with other donors and international actors to ***reinforce engagement of international organizations*** in the common goal to avert a world water crisis and meet the global challenges to provide water supply, sanitation, and sustainable water resources and watershed management for all. USAID works with national governments, financial institutions, and others to leverage capital from private domestic markets through sub-sovereign lending, guarantee and insurance schemes for risk mitigation, and sovereign and foreign exchange risk coverage. The Agency also engages at the highest levels with major international organizations (including the UN agencies, International Financial Institutions (IFIs), other bilateral donors, international public-private networks, non-governmental organizations) to advance collaboration on integrated water resources management (see Box 7).

Box 7

Reinforce Engagement of International Organizations

- USAID has partnered with the U.S. Department of State and the Global Water Partnership (GWP) to advance the development of **Integrated Water Resources Management (IWRM) Plans** at the national level in three target countries – El Salvador, Ethiopia and Indonesia. The project seeks to improve management of water resources and increase access to safe drinking water and sanitation through building national capacity to develop, manage, and implement integrated water plans; strengthen civil society involvement in the development planning process; and support transparent and accountable water governance in each focus country. In addition, the process will promote greater engagement by countries with the donor and NGO communities to develop specific activities that address priority needs. Progress made by the focus countries will serve as a model for “bottom-up,” partnership-driven approach to sustainable development and strengthens a mechanism other donors can use to support country efforts to develop integrated water resource management plans.
- Along with other major international organizations including the World Bank and UNICEF, USAID is a founding member of **The Global Public-Private Partnership for Handwashing with Soap**, which works to reduce the incidence of diarrheal diseases in developing countries by promoting changed hand washing behaviors. The initiative brings together the public sector, soap companies, and leading research institutions, making use of market and consumer studies to develop professional campaigns targeting high-risk groups such as children and mothers. Campaign channels include mass media, direct consumer contact, and government programs. Initiatives are active in Ghana, Nepal, Peru and Senegal. A global team closely monitors and synthesizes experiences to enable the continued development of state-of-the-art programs worldwide. Other partners include The World Bank and WSP, the London School of Hygiene and Tropical Medicine, the Academy for Educational Development, USAID, UNICEF, the Bank-Netherlands Water Partnership, and soap manufacturers such as Colgate-Palmolive, Procter & Gamble, and Unilever.
- The Cities Alliance was launched by the World Bank and United Nations Centre for Human Settlements (UN-Habitat) in 1999, with members including all the G-7 governments plus Brazil, Netherlands, Norway and Sweden, the Asian Development Bank, UN-Habitat, the United Nations Environment Programme, the World Bank, and local authorities, represented by United Cities and Local Governments (UCLG) and Metropolis. Alliance partners have joined forces to expand the level of resources reaching the urban poor, by improving the coherence of effort among on-going urban programs, and by more directly linking grant-funded urban development cooperation with investment follow-up. Created in 2002, **The Community Water and Sanitation Facility (CWSF)** within the Cities Alliance increases access to water and sanitation by providing grants to catalyze community-endorsed construction of improved water and sanitation services, and risk sharing and innovative financing. CWSF, through partnerships with private sector businesses, foundations, NGOs, CBOs, bilateral donors, multi-lateral development banks, and national and local governments will mobilize resources to support the efforts of slum dwellers and municipal governments to scale-up improvements in water access and sanitation.

Coordination and Implementation of Water Activities at USAID

Consistent with all of USAID’s work, the Agency’s portfolio of water activities is largely (but not exclusively) comprised of activities led by more than 100 Regional and Bilateral Missions and their implementing partners. Guided by our belief that water resource management problems and development challenges are best addressed by locally driven solutions, in locally appropriate ways, our worldwide portfolio of activities in 78 countries is designed and implemented in direct consultation with local and national partners and in the context of USAID country strategic planning. All activities emphasize and track measurable outcomes.

The Agency targets and tracks progress in 13 categories of water-related activities, including those related to: (1) water supply, sanitation, and wastewater management; (2) natural resources management; (3) economic development and food security; and (4) disaster preparedness. As for technical and sectoral areas of focus, an analysis of USAID's portfolio and expenditures reveals that Regional Bureaus and Missions are engaged in a broad spectrum of water activities across all sectors. For example, we have activities focused on the health and welfare of rural households (water supply, point of use water treatment and safe storage of water in the household, sanitation, and hygiene promotion), on the needs of urban areas (infrastructure and improved utility operations), on economic growth (often with emphasis on energy and industry), on food security (irrigated agriculture and soil/water quality), and on disaster management and humanitarian response.

To complement these targeted, locally demand-driven efforts, we strive to ensure that lessons learned are shared across the Agency's portfolio, and that an IWRM approach increasingly informs strategic plans and activity designs. In this way we continually endeavor to capture the best of USAID's local experience while sharing knowledge about the best of the world's experience with our Mission program staff. Our Agency Water Team is a good example of how we are working to coordinate across sectors, across Bureaus and Missions, and across agencies. We have several units at USAID/Washington that work on various parts of the integrated water resources management challenge, and these include our Urban Programs Team, our new Engineering and Infrastructure Office, our Office of Development Credit, our Global Health Bureau, our Office of Foreign Disaster Assistance, and each of our four Regional Bureaus. All of these units and more participate on our extended Agency Water Team which provides Mission support, knowledge management, and technical leadership in interagency processes and international fora. In this fashion, we coordinate internally, while contributing to and keeping abreast of the latest developments and best practices in the field of IWRM.

Beyond this considerable pool of technical expertise within the Agency, our implementation partners bring a wealth of experience and knowledge to our collective efforts. Our partners include universities, NGOs, faith-based organizations, international institutions (including the CGIAR centers), and a number of highly experienced private firms involved in the delivery of water services for decades. USAID's long-term presence in target countries provides a particular advantage in such collaborations, by establishing continuity with foreign governments and other partners, and providing necessary contextual perspective to achieve the aims of IWRM.

USAID Investment and Impact in the Water Sector

Water for the Poor Initiative

In 2002, Secretary of State Colin Powell announced the \$970 million U.S. Government "Water for the Poor" Signature Initiative at the World Summit for Sustainable Development in Johannesburg. The three-year initiative has provided substantial resources to improve sustainable management of water resources and address needs for increased access to water and sanitation.

Over the two and a half years since WSSD, USAID has made major progress in addressing the serious water resource management concerns facing developing countries around the world in each of the three component areas of the Initiative:

- access to clean water and sanitation services;
- improved watershed management; and
- increased water productivity.

Summary of Investments to Date

USAID will greatly exceed its commitment to water investments made at WSSD. The three-year total “Water for the Poor” Initiative obligations almost double the original commitment announced (with \$970 million pledged, and an estimated actual total of \$1.9 billion invested).

- Included in the “**Access to Clean Water and Sanitation Services**” category are projects involving construction and rehabilitation of water treatment plants, water and sewer networks, wells, and sewage treatment plants, as well as health and hygiene promotion programs that will vastly increase the health impact of infrastructure investments. Over the three years of the Initiative, USAID originally committed to providing \$510 million in programs worldwide for water supply, sanitation and health projects. In the first two years of the Initiative, and excluding expenditures in Iraq, USAID actually invested about \$400 million in over 60 countries to improve water services, sanitation, and wastewater treatment services to underserved populations. Estimates for the third year of the Initiative indicate an additional \$392 million to be spent, bringing **the three-year total for the category (not counting Iraq) to \$792 million**. Water supply, sanitation, and wastewater obligations in Iraq from FY03-05 add another \$562 million to this amount, for a grand total of \$1.31 billion over three years. In addition, USAID’s Development Credit Authority has helped secure loan portfolio guarantees in South Africa, The Philippines, Morocco, India, Bosnia, Kyrgyzstan, Egypt, Honduras, and Ukraine, all expected to leverage over \$228 million in private funds for water supply and wastewater services to supplement direct assistance.
- The second principal component of the Water for the Poor Initiative is “**Improved Watershed Management**.” USAID committed to investing nearly \$400 million over the three-year Initiative to integrate surface water, aquifer, and coastal zone issues to protect watersheds and better manage water and coastal resources. Activities include the development of policies, institutions, and management strategies at the regional, national, and local scales for improved watershed management and interventions to reduce water pollution. In the first two years of the Initiative, USAID invested \$189 million on integrated watershed and coastal area management in over 50 countries, excluding Iraq. An additional \$103 million is estimated to be spent in 2005, bringing **the three-year total for the category (less Iraq) to \$292 million**. Iraq expenditures from FY03-05 add about \$5 million more, for a grand total to \$297 million over three years. The original target of \$400 million was based on straight-line projections from prior year obligations, and the shortfall during this recent three-year period is explained by shifting priorities and programs, including greater investments in the other two components of the Water for the Poor Initiative.

- The final component of the Water for the Poor Initiative is **“Increased Water Productivity”**. In many parts of the world, water is becoming a constraint to economic growth and food production. Increasing diversions of surface water, over-abstraction of groundwater, and water quality deterioration threaten the sustainability of the resource and, in turn, the food production systems and economies. The productivity of water use can be improved in the agricultural, industrial, and commercial sectors. However, at the global level, agriculture consumes more than 70 percent of the freshwater used, and some of the most significant savings can be made by improving the efficiency of water use in that sector. In some countries, such as many in sub-Saharan Africa, there is potential to couple conservation and demand management with further development of water resources for agriculture and aquaculture. As part of the Water for the Poor Initiative, the United States committed to investing \$60 million over three years to ensure that agricultural and industrial water use is as productive as possible. In the first two years of the Initiative, USAID invested \$184 million in water productivity activities in 40 countries. In 2005, \$43 million additional is expected to be spent, bringing **the three-year total for the category (less Iraq) to \$227 million**. An additional \$23 million has been spent in Iraq from FY03-05, making the grand total invested in this category \$249 million over three years.

The Water for the Poor Initiative commitment and actual obligated amounts for the three years of the Initiative are summarized in Table 1.

Table 1
SUMMARY OF ESTIMATED USAID OBLIGATIONS
WATER FOR THE POOR INITIATIVE - FY 2003-2005
(millions of dollars)

CATEGORY	YEAR			
	2003	2004	2005	ALL YEARS
<i>TOTAL WITHOUT IRAQ</i>				
Water Supply, Sanitation, Hygiene	159.86	239.825	391.83	791.515
Watershed Management	105.656	83.338	103.154	292.148
Water Productivity	115.606	68.414	42.815	226.835
SUBTOTAL	381.122	391.577	537.799	1310.498
<i>IRAQ ONLY</i>				
Water Supply, Sanitation, Hygiene	218.863	324.935	17.8	561.598
Watershed Management	4	1	0	5
Water Productivity	0	22.652	0	22.652
SUBTOTAL	222.863	348.587	17.8	589.25
GRAND TOTAL INCLUDING IRAQ	603.985	740.164	555.599	1899.748

Summary of Impacts to Date

Among the major results achieved since the onset of the Initiative in the 78 countries where the Agency has implemented water programs, USAID can report that:

- Over 12,163,000 people in developing countries have received improved access to clean water supply;
- Over 21,395,000 people have received improved access to adequate sanitation;
- Over 2,400 watershed governance groups were convened and supported to undertake ongoing basin-scale, integrated water resources decision-making to address a diversity of water uses and needs; and
- Over 203 watershed management plans have been developed and approved by stakeholders at the watershed or basin scale.

Beyond these raw numbers, the types of interventions funded by USAID have contributed to a permanent shift in the way in which water resources management and water supply and sanitation service delivery are approached in the countries served, including:

- Improved institutions and enabling policies to permit mobilization of domestic capital from public and private sources to meet the needs of unserved populations in water supply and sanitation;
- Enhanced capacity of communities, governments, civil society, and the private sector to manage water resources and provide services in an efficient and effective manner;
- Strengthened structures for transparent, democratic governance, decision-making, and conflict resolution about water resources shared among many users;
- Increased opportunities for constructive partnerships between the public and private sectors, and among donors and international institutions;
- Increased sustainability of the natural resource base required to provide water services and process waste products;
- A more integrated vision and technical approach that links benefits from water resources management to other development goals including health, economic growth, education, and democracy and governance.

Looking Ahead: Water in the USAID Strategic Framework

The Agency is presently revising its approach to strategic planning, in general, moving beyond individual country strategies towards a core set of shared Agency Program Components, coupled with regional strategic frameworks that more comprehensively and strategically identify needs and priorities. Water-related activities are directly addressed in 3 of the 40 program components that will be explicitly targeted and tracked in the new Agency framework, and indirectly addressed in many others. One of USAID's new program components and associated common indicators deals directly with improving access to clean water and sanitation.

Our Regional Bureaus are now developing their own strategic frameworks consistent with the overall USAID program components, while remaining focused on the comparative advantage that USAID has within their region, and the mix of international interests and factors that must

be considered in designing development assistance activities. Those regional frameworks are just emerging, but some can be expected to focus on the central role that successful water resources management plays in achieving and sustaining development objectives, including the reduction of conflict.

Financing water infrastructure is another major development challenge. For the Middle East alone, for example, to raise region-wide coverage to 90 per cent for water supply and 80 per cent for sewerage and sanitation, the World Bank estimates that additional water investment requirements are on the order of \$5 billion annually. Funds from the international donor community are expected to meet less than 5 per cent of the financing needs. Access to clean drinking water and sanitation for much of the world will only become a reality through substantial municipal and private sector investment. USAID believes that regional solutions will play an important role in resolving serious water shortages, and our emerging Regional Bureau strategic frameworks will support the establishment of enabling environments and pooled financing mechanisms needed to attract municipal and private sector investment for water infrastructure.

All regions where USAID works are committed to addressing water resources management and water supply and sanitation service delivery in the most strategic and appropriate ways possible within the context of other national priorities, as well as Agency and U.S. government commitments and funding realities for each region.

Donor Coordination

To achieve the drinking water target in the Millennium Declaration for 2015, an additional 1.2 billion people will need access from 2002 to 2015. This number translates into providing new services for 260,000 people every day until 2015. The situation for sanitation is even more dramatic, and at least 1.8 billion will require sanitation from 2002 to 2015, or 350,000 new people per day.³

The total costs of meeting these 2015 targets depend on the type and level of service that will be provided, and the strategies employed to reduce the service deficit. The choice of countries, the urban-rural balance of the target group, the specific sub-populations targeted, and the technologies and service standards applied will all have a significant bearing on actual costs to meet these goals. Using the most basic standards of service and technology, it is estimated that the 2015 goals could be attained at an extra annual investment cost of about \$10-12 billion.⁴ However, providing full water and sewerage connections and primary wastewater treatment to unserved urban populations would raise the annual cost of the 2015 goal to \$17 billion for water and \$32 billion for sanitation and sewerage, or a total of \$49 billion annually.⁵

³ WHO/UNICEF Joint Monitoring Programme. Meeting the MDG Drinking Water and Sanitation Target: A Mid-Term Assessment of Progress. 2004.

⁴ WHO/UNICEF Joint Monitoring Programme. Meeting the MDG Drinking Water and Sanitation Target: A Mid-Term Assessment of Progress. 2004.

⁵ World Panel on Financing Infrastructure, Michel Camdessus Chair. Financing Water for All. March 2003.

Going beyond water supply and sanitation alone, in 2000 the World Water Commission estimated that to meet the full range of water needs by 2025—including agriculture, environment, energy, and industry, as well as water supply and sanitation—about \$180 billion would be required *each year* in new investments, not including operations, maintenance, or repairs (or \$4.5 trillion dollars over the full 25 year period).⁶

The global water community is confronting this reality by taking a closer look at where resources are currently coming from, and where they must be increased in the future. Current estimates are that financing to address all water investment needs in developing countries is drawn from a mix of several sources including:⁷

- domestic public sector financing at the national or local level (from taxes, user fees, public debt, etc.) *[64% of total expenditures]*;
- direct investments from domestic private sources *[19% of total expenditures]*;
- direct investments from international private sources *[5% of total expenditures]*; and
- international sources of support and cooperation (including multilateral and bilateral Official Development Assistance (ODA)) *[12% of total expenditures]*. (see Box 8)⁸

Box 8

International Donors and the Water Sector

An analysis of donor data in the water supply and sanitation subsector alone reveals that in recent years total aid allocations have averaged about \$3 billion a year. ODA for water supply and sanitation remained relatively stable in the 1990s, at about 6% of overall bilateral aid and 4-5% of multilateral aid. In 2005, all water-related funding represented about 6.8% of the total USAID budget, and water supply and sanitation obligations specifically accounted for about 5% of the entire Agency budget (including the budget for countries where there were no water investments at all).

Although virtually all major donors invest at least to some degree in water resources management, worldwide the water sector is dominated by a handful of donors. From 1999-2001, Japan was by far the largest investor in the water supply and sanitation subsector, accounting for about one-third of total aid to this category (35%). Activities funded by six other donors added up to a further 45%: the World Bank's International Development Association (IDA) (11%), Germany (11%), USAID (8%), France (5%), the UK (5%), and the European Commission (5%).

⁶ World Water Commission. World Water Vision: A Water Secure World. The Hague. 2000. and Global Water Partnership. Towards Water Security: A Framework for Action. The Hague. 2000.

⁷ Global Water Partnership. Towards Water Security: A Framework for Action. The Hague. 2000. Alternative estimates for the water supply and sanitation subsector only were provided by the World Panel on Financing Infrastructure (2003) based on analysis in the mid-1990s, where financing sources were assessed to be domestic public sector 65–70%, domestic private sector 5%, international donors 10–15%, and international private companies 10–15%.

⁸ Overall donor estimates in Box 8 uses the DAC definition of water supply and sanitation which includes activities related to water resource policy, planning and programs, water legislation and management, water resource development and protection, water supply and use, sanitation, and education and training when associated with an activity that is primarily water supply and sanitation. Dams and reservoirs used for irrigation and hydropower, aid to the water sector extended within multi-sectoral programs, direct budgetary support, and loans are not included in this estimate. Source for Box 8: Tearfund, 2004. Making Every Drop Count: An Assessment of Donor Progress Towards the Water and Sanitation Target. Middlesex, UK.

What is clear from these figures is that diverse financing sources have, and will continue to have, an important and distinct role to play in ensuring a sustainable and secure water future for the world. Each aspect of water resources management will require a unique combination of funding that may depend more heavily on some of these sources than on others. In all subsectors, however, it is certain that the majority of future investments must increasingly derive from an appropriate balance of self-regenerating domestic public as well as domestic and international private capital sources. This reality will more than ever require collaboration and cooperation among multiple actors from the public and private sectors within countries and throughout the international community.

The responsibility for forging the enabling environment necessary for sustainable financing as part of overall better water governance throughout the world is ultimately the responsibility of local actors. These processes are unlikely to take hold in many places, however, without increasingly coordinated partnerships among external donors, domestic public bodies, the private sector, and civil society. Technical assistance plays a catalytic role. Targeted and strategic expenditures of development assistance funds can and do help promote advances in the sustainable management of water resources through good governance.

USAID's comprehensive strategy for integrated water resources management, as reflected in the five principles of the Evian G8 Water Action Plan, directly confronts this reality with catalytic and effective approaches to change. By "promoting good governance;" "utilizing all financial resources;" "building infrastructure by empowering local authorities and communities;" "strengthening monitoring, assessment, and research;" and "reinforcing engagement of international organizations," the conditions are created to encourage public and private sector investment, and maximize the impact, sustainability, and replicability of USAID interventions. Such support is most effective when directed to locally owned strategies that encourage innovative processes and approaches, broaden the menu of tools and options available, leverage internal and external support and investments, and build capacity in civil society and the public and private sectors alike.

USAID views on H.R. 1973 and Conclusion

Mr. Chairman, as you have now heard, USAID is making solid progress on our water resources management and development programs worldwide, and we are doing so with the same goals and approaches as are outlined in H.R. 1973. We are highly committed to contributing to the Millennium Declaration and the WSSD Plan of Implementation, and to influence the direction of others similarly committed. The scope of the challenge and the limited resources available to address it argue that we must be highly strategic and catalytic at every opportunity.

And I believe we are. We are placing strong emphasis on innovative financing, partnerships (both public-public and public-private), building the right enabling environment that will attract new private capital, and enhancing the capacity of governments and their institutions responsible for all aspects of water resources management – protecting sources, delivering services, and promoting public health. We are promoting community-based approaches while simultaneously advancing the practice of river basin and transboundary river basin management in many areas of the globe. Although much of our emphasis is on the delivery of water supply and sanitation

services, we are also focused on the broader development objectives that are intimately connected to successful water resources management. The U.S. has considerable experience and expertise to share in all of these areas and more, but progress will hinge on our ability to foster the political commitment to provide safe drinking water and basic sanitation for people in countries that have multiple, pressing needs on their development agendas. This most emphatically includes reforming water sector governance, and establishing financially sustainable water sector institutions, including water and sanitation service providers, and establishing clear objectives and performance indicators.

H.R. 1973 describes well the key challenges and gives due emphasis to the human health and economic impacts. USAID is already in full support of the bill's intent to achieve improved international coordination, new and innovative financing, and community-based approaches that involve civil society in helping to achieve equitable access to safe water and sanitation.

I think that we can be proud of the leadership that the United States has demonstrated in recent years on these issues, and that we have positioned ourselves well to maximize further U.S. contribution and impact on the challenges of global water security. Thank you very much once again for the opportunity to testify before this Committee. I would be happy to answer any questions the Committee Members may have.

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